

Results: During the investigation period 9 patients were admitted to the hospital with norovirus infection (8 patients to the test ward and 1 patient to the control ward). None of them caused nosocomial spread. The consumption amount of the new antiseptic during the period was 3.1 and 5 times higher at the internal medicine ward A and at the pediatric ward, respectively, than that of the existing antiseptic from Dec. 1, 2012 to Feb. 29, 2013.

Conclusions: Despite the number of the patients who were admitted to the hospital with norovirus was similar to that of the last period, an outbreak was prevented. This result suggests that our preventive measures, reeducation and use of the new antiseptic, were effective. Although further studies are necessary to determine the effectiveness of the new antiseptic, its increased amount of consumption indicates behavioral change of the clinical staff toward improved adherence to hand hygiene.

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EFFECTIVENESS OF NURSES UNDERGOING TRAINING AS SEEDED PERSONNEL FOR INFECTION CONTROL

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Objective: To train staff nurses as seeded personnel for infection control in order to implement practical experiences in clinical medicine.

Methods: The effectiveness of 37 nurses chosen to undergo eight units of infection control training was analyzed their test scores before and after the training.

Results: They tested an average of 60.55 points before training and an average of 88.12 points after training, with an average satisfaction of 89.55 points. Courses included an introduction of nosocomial infection control and crisis management, cleaning, disinfection and sterilization, infectious disease notification and isolation precautions, infection control measures for multi-drug resistant strains, specimen collection and transport, hospital environmental monitoring, introduction of common microbial, protection measures for sharp objects wounds and blood or body fluids exposure, hand hygiene, personal protective equipment and analysis on important hospital inspection. Overall, the nurses improved by an average of 26.02%.

Conclusion: Training seeded personnel for infection control allows nurses to apply the knowledge learned to clinical work and thus enhance the health and quality of care. Nurses taking the role as seeded personnel for infection control are necessary and require continuing education and training.

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TO IMPROVE THE INCIDENCE OF NEEDLESTICK INJURIES AMONG HEALTHCARE WORKERS IN A COMMUNITY HOSPITAL

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Purpose: Needlestick injuries are one of the most common occupational exposures among healthcare workers (HCWs). Many studies shown that more than 80% of HCWs occurred at least once during their clinical care work and percutaneous injuries account for about 0.32% (0.18%-0.46%) HIV transmission. Thus, it is very important for HCWs to reducing the incidence and exposure risk of needlestick injury.

Methods: There were 113 HCWs in a community hospital (with 92 beds) included. The incidence of needlestick injuries was calculated from January 2009 to December 2013 under the implementation of infection control policies as follows: 1. Educating new recruits and in-service staffs with adequate lessons to avoid needlestick injuries. 2. To analyze the root causes of needlestick and take appropriate measures. 3. Periodic evaluation of waste needles handling. 4. Teaching right needles operating procedures such as one hand recapping (or no recapping) or the use of needle collection box. 5. Establishing a quarterly Study Session to discuss the risk of needlestick injury.

Results: There were totally 8 needlestick injuries events from 2009 to 2012 and average incidence of needlestick injuries were 1.14% (Figure.1). Besides, we found the leading cause of needle injury is recapping needles,

the safety needle devices were subsequently adopted since April 2012. In 2013, the incidence of needlestick injuries among HCWs was zero.

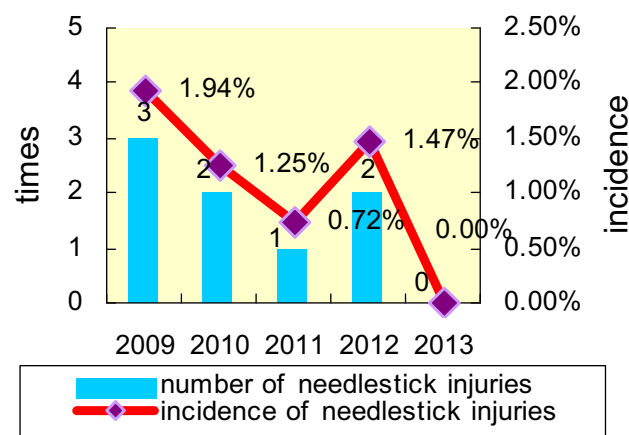


Figure 1 The incidence of needlestick injuries of the HCWs in a community hospital since 2009 to 2013.

Conclusions: Until September 2014, the tracked incidence of needlestick maintained 0%. Hopefully, we could maintain correct work habits and keep it up to stay zero incidence of needlestick injuries.

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CHANGE IN USE OF HAND ANTISEPTIC DUE TO EDUCATIONAL INTERVENTION

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Purpose: Hand hygiene is cheap, easy and effective. However, it isn't carried out in appropriate ways, times and places. In 2013, group hospital staff used approximately 6ml of antiseptic per day per patient. It's insufficient. Infection Control Team (ICT) performed hand hygiene educational intervention and reported the change of hand antiseptic consumption.

Methods: Investigation period: April, 2012 to June, 2013 (before intervention). July, 2013 to September, 2014 (after intervention). Object: Quantity of hand antiseptic withdrawal from distribution section and MRSA cases of 3 group hospitals. Education Method: July, 2013, held lecture "Five Moments for Hand Hygiene" proposed by the WHO. September, started hospital rounds of ICT. December, switched from gel to foam hand antiseptic. June, 2014, held lecture of hand hygiene at the 3 group hospitals. July, introduced portable hand antiseptic. Analysis: Performed paired t test of hand antiseptic consumption, number of detected cases and number of patients under treatment for MRSA before and after intervention. Software: JMP11.

Results: Consumption of hand antiseptic for 3 group hospitals before intervention 98050±14699ml after 171632±59380ml. Increased significantly ($p<.05^*$). MRSA cases before intervention 41.6±8.56 after 27.4±5.9. Decreased significantly ($p<.01^{**}$). Patients under treatment for MRSA before intervention 13.0±3.61 after 10.2±2.17.

Conclusions: MRSA cases decreased significantly. Other factors such as changes in doctors. Difficult to say with certainty that decrease, only due to antiseptic consumption increase. It's thought that lecture "Five Moments for Hand Hygiene" and monitoring effect by ICT rounds contributed to consumption. It's thought that change in antiseptic type (gel to foam) influenced consumption. Use of portable antiseptic, influenced consumption by enabling hand hygiene at appropriate times and places.

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USING IMMERSIVE SITUATION TO CONFIRM CLEANER'S EDUCATION EFFECTIVENESS IN REGIONAL TEACHING HOSPITAL

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